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EXAMINER

BEHULU, ALEMAYEHU

ART UNIT	PAPER NUMBER
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2682

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8

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/781,107

Applicant(s)

MURNAGHAN ET AL.

Examiner

Alemayehu Behulu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) Z.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Specification***

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claim 1, 4, 5, 15, 19 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Ausemes (U.S Patent No. 6,434,403).

Referring to claim 1, a wireless communication device (figures 1-2), which provide communication capability for a personal data assistant (column 1, lines 5-9 and column 3, lines 5-21), comprising: a housing (figures 1 and 2, number 102, column 2, lines 65-67 and column 3, lines 22-26 and claim 1), a modem within the housing (figure 2, number 220) which provides communication capability for the wireless communication device (figure 2, number 210 and claim 17, and logic in the housing adapted to check for communications (figure 2, number 210).

Referring to claim 4, a wireless communication device recited in claim 1, the personal data assistant is a hand-held data organizer (figure 1 and column 3, lines 5-911).

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Referring to claim 5, a wireless communication device recited in claim 1, a battery for providing power to the wireless communication device (figure 2, number 230 and column 5, lines 66-column 6, line 4).

Referring to claim 15, a wireless communication device recited in claim 1, wherein the logic is a mini microchip (figure 3, number 305 and column 3, lines 1-2).

Referring to claim 19, a wireless communication device recited in claim 1, wherein the housing provides a compact configuration for the wireless communication device (figure 1 and column 4, lines 30-39, column 5, lines 23-36 and claim 1).

Referring to claim 22, Ausemes teaches, a wireless communication device recited in claim 1, wherein the logic is a processor (column 5, lines 55-65).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 2, 3, 6, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S Patent No. 6,434,403) further in view of Tso (U.S. Patent No. 5,890,016).

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Referring to claim 2, Ausemes teaches a wireless communication device recited in claim 1. But, Ausemes fails to teach an interface board that provides connectivity between the modem and the personal data assistant. However, Tso teaches an interface board that provides connectivity between the modem and the personal data assistant (figures 1a and 1b, number 114 and column 2, lines 19-36). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the art of Ausemes (U.S Patent No. 6,434,403) with Tso (U.S. Patent No. 5,890,016) in order to have communication capability and easy to carry around.

Referring to claim 3, the combination of Ausemes and Tso teach a wireless communication device recited in claim 2, the communication is electronic mail (see Ausemes column 7, lines 9-20)

Referring to claim 6, Ausemes teaches a wireless communication device recited in claim 2. But, Ausemes fails to teach a connector board for providing electrical connectivity between the modem and the interface board. However, Tso teaches a connector board for providing electrical connectivity between the modem and the interface board (see figure 1b). Regarding to the claimed limitation that connector board provides electrical connectivity, it should be noted that Tso teaches connection of the cellular modem with Personal Digital Assistant with big arrow (figure 1b, numbers 114 and 109). The connection between the two provides the electrical connectivity. Therefore, at the time of the invention, it would have to a person of ordinary skill in the art to combine the art of Ausemes (U.S Patent No. 6,434,403) with Tso (U.S. Patent No. 5,890,016) so that the modem can be detachable from the PDA.

Referring to claims 7 and 8 the combination of Ausemes and Tso disclose mechanical offset as claimed (see Ausemes figure 1b).

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S Patent No. 6,434,403) further in view of Matsuo (U.S. Patent No. 6,525,293).

Referring to claim 9, Ausemes teaches a wireless communication device recited in claim 5. But, Ausemes fail to teach an LED light, where the LED light indicates the charge of the battery. However, Matsuo teaches an LED light, where the LED light indicates the charge of the battery (figure 1, numbers 102-105 and column 3, lines 7-54). Therefore, it would have been obvious to a person of ordinary skill in the art to combine the art of Ausemes (U.S Patent No. 6,434,403) with Matsuo (U.S. Patent No. 6,525,293) in order to indicate the battery status of the communication device.

4. Claim 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S Patent No. 6,434,403) further in view of Bouvrette (U.S. Patent No. 4,626,622).

Referring to claim 10, Ausemes teaches a wireless communication device recited in claim 1. But, Ausemes fail to teach an LED light, where the LED light indicates if the modem has received data. However, Bouvrette teaches an LED light, where the LED light indicates if the modem has received data (column 7, lines 3-12). Therefore, at the time of the invention, it would have been

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obvious to a person of ordinary skill in the art to combine the art of Ausemes (U.S Patent No. 6,434,403) with Bouvrette (U.S. Patent No. 4,626,622) in order to indicate the communication status of the communication device.

Referring to claim 11, Ausemes teaches a wireless communication device recited in claim 1. But, Ausemes fail to teach an LED light, where the LED light indicates if the modem has transmitted data. However, Bouvrette teaches an LED light, where the LED light indicates if the modem has transmitted data (column 7, lines 3-12). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the art of Ausemes (U.S Patent No. 6,434,403) with Bouvrette (U.S. Patent No. 4,626,622) in order to indicate the communication status of the communication device.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S Patent No. 6,434,403) further in view of Kelly (U.S. Patent No. 4,819,235).

Referring to claim 12, Ausemes teaches a wireless communication device recited in claim 1. But, Ausemes fails to teach an LED light, where the LED light indicates if the modem is registered. However, Kelly teaches an LED light, where the LED light indicates if the modem is registered (figure 1, numbers 26 and 28 and column 6, lines 63-column 7, lines 5). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the art of Ausemes (U.S Patent No. 6,434,403) with Bouvrette Kelly (U.S. Patent No. 4,819,235) in order to indicate the communication status of modem.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S. Patent No. 6,434,403) further in view of Zicker (U.S. Patent No. 5,594,782).

Referring to claim 13, Ausemes teaches a wireless communication device recited in claim 1. But, Ausemes fails to teach an LED light, where the LED light flashes to indicate server has communication. However, Zicker teaches the LED light flashes to indicate server has communication (figure 9, numbers 912 and 913 and column 23, lines 38-45). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the art of Ausemes (U.S. Patent No. 6,434,403) with Zicker (U.S. Patent No. 5,594,782) in order to indicate the communication status of server.

7. Claim 14, 20, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S. Patent No. 6,434,403) further in view of Want (U.S. Patent No. 6,122,520).

Referring to claim 14, Ausemes teaches a wireless communication device recited in claim 1. But, Ausemes fails to teach that the modem is a cellular digital packet data (CDPD) modem. However, Want teaches that the modem is a cellular digital packet data (CDPD) modem (column 5, lines 35-43). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the art of Ausemes (U.S. Patent No. 6,434,403) with Want (U.S. Patent No. 6,122,520) so that more information can be transmitted.



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Referring to claim 20, Ausemes teaches a wireless communication device recited in claim 1.

But, Ausemes fails to teach that the logic is a field programmable gate array (FPGA). However,

Want teaches that the logic is a field programmable gate array (FPGA) (column 9, lines 34-57).

Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill

in the art to combine the art of Ausemes (U.S. Patent No. 6,434,403) with Want (U.S. Patent No.

6,122,520) in order to program the communication device's controller such that the

communication device can be used for different applications.

Referring to claim 21, Ausemes teaches, a wireless communication device recited in claim 1.

But, Ausemes fails to teach that the logic is an application specific integrated circuit (ASIC).

However, Want teaches that the logic is an application specific integrated circuit (ASIC).

(column 9, lines 34-57). Therefore, it would have been obvious to a person of ordinary skill in

the art to combine the art of Ausemes (U.S. Patent No. 6,434,403) with Want (U.S. Patent No.

6,122,520) in order to program the communication device's controller such that the

communication device can be used for different applications.

Referring to claim 23, Ausemes teaches, a wireless communication device recited in claim 1.

But, Ausemes fails to teach that the logic is a programmable logic. However, Want teaches that

the logic is a programmable logic (column 9, lines 34-57). Therefore, at the time of the

invention, it would have been obvious to a person of ordinary skill in the art to combine the art of

Ausemes (U.S. Patent No. 6,434,403) with Want (U.S. Patent No. 6,122,520) in order to change

the function of the communication device as needed.

8. Claim 16-18 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S Patent No. 6,434,403) further in view of Salo (U.S. Patent No. 6,609,148).

Referring to claim 16, Ausemes teaches a wireless communication device recited in claim 1. But, Ausemes fails to teach the logic periodically checks for message notifications. However, Salo teaches logic periodically checks for message notifications (column 18, lines 16-39 and column 7, lines 6-15). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the art of Ausemes (U.S Patent No. 6,434,403) with Salo (U.S. Patent No. 6,609,148) in order to able to monitor the link status.

Referring to claim 17, the combination of Ausemes and Salo teach a wireless communication device recited in claim 16 (see Ausemes figures 1- 2) , that the message notification indicates that a server has communications for a user (see Salo column 18, lines 9-16 and column 7, lines 6-15).

Referring to claim 18 and 24, the combination of Ausemes and Salo teach a wireless communication device recited in claim 17 (see Ausemes figures 1-2 and column 1, lines 6-9) that the logic periodically checks for message notifications (see Salo column 18, lines 9-16 and column 7, lines 6-15) . But, Ausemes and Salo fail to disclose notification while the modem is not in use and powered down. However, it is important to note that the message notification in the modified Ausemes need to be monitored when the modem is not in use and powered down

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as well so that any important message will not be missed. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the above combination of Ausemes and Salo such that the message notification is periodically monitored when the modem is not in use and powered down as well. The motivation is not to miss any important message.

9. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S. Patent No. 6,434,403) further in view of Jones (U.S. Patent No. 6,191,743).

Referring to claim 25, Ausemes teaches a wireless communication device recited in claim 1. But, Ausemes fails to teach a detachable antenna coupled with wireless communication device, where the detachable antenna may be detached when the wireless communication device is not in use.

However, Jones teaches teach a detachable antenna coupled with wireless communication device, where the detachable antenna may be detached when the wireless communication device is not in use (figure 4, and column 2, lines 44-58, column 4, lines 49-55, and claims 1, 2, 6-9).

Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the art of Ausemes (U.S. Patent No. 6,434,403) with Jones (U.S. Patent No. 6,191,743) in order to provide an antenna interface for PDA that allows the user to select a preferred placement of the antenna instead of fixed attachment.

10. Claim 26, 30-32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S. Patent No. 6,434,403) and Salo (U.S. Patent No. 6,609,148) further in view of Foladare (U.S. Patent No. 5,894,595).

Referring to claim 26, Ausemes teaches a handheld communication device which provides wireless communication capability for personal data assistant (see Ausemes figure 1-2 and column 1, lines 5-9), the device comprising a modem for providing wireless communication for the personal data assistant (see Ausemes figure 2, number 220). But, Ausemes fail to teach logic in communication with the handheld communication device where the logic checks for message notifications. However, Salo teaches that the logic checks for message notifications (see Salo column 18, lines 9-16 and column 7, lines 6-15). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Ausemes (U.S Patent No. 6,434,403) with Salo (U.S. Patent No. 6,609,148) in order to be aware of the communication status of the device continuously. But, the combination of Ausemes and Salo, fail to teach an indicator which is activated when the logic determines that the modem has received communications. However, Foladare teaches indicator which is activated when the logic determines that the modem has received communications (column 1, lines 49-column 2, lines 42 and claims 19, 21, 23 and 25). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the art of Ausemes (U.S Patent No. 6,434,403) and Salo (U.S. Patent No. 6,609,148) with Foladare (U.S. Patent No. 5,894,595) in order not to miss important incoming messages.

Referring to claim 30, the combination of Ausemes, Salo and Foladare teach a handheld communication device as recited in claim 26, that the personal data assistant is a handheld data organizer (see Ausemes figure 1 and column 3, lines 5-11).

Referring to claim 31, the combination of Ausemes, Salo and Foladare teach a handheld communication device as recited in claim 26, that the indicator is activated while the personal data organizer is running another application (see Foladare column 1, lines 49-column 2, lines 42).

Referring to claim 32, the combination of Ausemes, Salo and Foladare teach a handheld communication device as recited in claim 26, that logic checks for communications received by the modem while the personal data assistant is running another application (see Foladare column 1, lines 49-column 2, lines 42 and claims 19, 21, 23, and 25).

Referring to claim 35, the combination of Ausemes, Salo and Foladare teach a handheld communication device as recited in claim 26, that message notifications indicate when a user receives communications (see Salo column 18, lines 9-16 and column 7, lines 6-15).

11. Claim 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S. Patent No. 6,434,403), Salo (U.S. Patent No. 6,609,148) and Foladare (U.S. Patent No. 5,894,595) further in view of Tso (U.S. Patent No. 5,890,016).

Referring to claim 27, the combination of Ausemes, Salo and Foladare teach a handheld communication device as recited in claim 26. But, Ausemes, Salo and Foladare fail to teach an interface board for connectivity between the handheld communication device and the personal

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data assistant. However, Tso teaches interface board for connectivity between the handheld communication device and the personal data assistant (figure 1b). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Ausemes (U.S Patent No. 6,434,403), Salo (U.S. Patent No. 6,609,148) and Foladare (U.S. Patent No. 5,894,595) with Tso (U.S. Patent No. 5,890,016) in order to have the communication devices fit together smoothly.

Referring to claim 28, the combination of Ausemes, Salo, Foladare and Tso teach a handheld communication device as recited in claim 27, comprising a housing which encloses the interface board, the modem and the logic, where the housing provides a compact configuration for the hand held communication device (see Ausemes figure 1-2 and number 102, column 2, lines 65-67 and column 3, lines 22-26 and claim 1).

Referring to claim 29, the combination of Ausemes, Salo, Foladare and Tso teach a handheld communication device as recited in claim 28 comprising, a connector board which provides mechanical offsets between the interface board and the modem such that interface board and the modem fit compactly within the housing of the handheld communication device (see Tso, figure 1a and 1b).

12. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S Patent No. 6,434,403) and Salo (U.S. Patent No. 6,609,148), Foladare (U.S. Patent No. 5,894,595) further in view of Bouvrette (U.S. Patent No. 4,626,622).

Referring to claim 33, the combination of Ausemes, Salo and Foladare teach a handheld communication device as recited in claim 26. But, Ausemes, Salo and Foladare fail to teach that the indicator is an LED. However, Bouvrette teaches the indicator is an LED (column 7, lines 3-12). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the art of Ausemes, Salo and Foladare with Bouvrette in order to determine visually the type of communication.

13. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S. Patent No. 6,434,403) and Salo (U.S. Patent No. 6,609,148), Foladare (U.S. Patent No. 5,894,595) further in view of Jones (U.S. Patent No. 6,191,743).

Referring to claim 34, the combination of Ausemes, Salo and Foladare teach a handheld communication device as recited in claim 26. But, Ausemes, Salo and Foladare fail to teach a detachable antenna attached to the handheld communication device. However, Jones teaches teach a detachable antenna coupled with wireless communication device, where the detachable antenna may be detached when the wireless communication device is not in use (figure 4, and column 2, lines 44-58, column 4, lines 49-55, and claims 1, 2, 6-9). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the art of Ausemes (U.S. Patent No. 6,434,403), Salo (U.S. Patent No. 6,609,148) and Foladare (U.S. Patent No. 5,894,595) with Jones (U.S. Patent No. 6,191,743) in order to provide an antenna

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interface for PDA that allows the user to select a preferred placement of the antenna instead of fixed attachment.

14. Claim 36, 37, 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S Patent No. 6,434,403) and Tso (U.S. Patent No. 5,890,016) further in view of Foladare (U.S. Patent No. 5,894,595)

Referring to claim 36, Ausemes teaches a communication device providing wireless communications for a personal data assistant (see Ausemes figure 1), comprising a modem for receiving communications (see Ausemes figure 2, number 220). But, Ausemes fail to teach an interface in communication with the personal data assistant where the interface provides connectivity between both the communication device and personal data assistant. However, Tso teaches an interface in communication with the personal data assistant where the interface provides connectivity between both the communication device and personal data assistant (see Tso figure 1b). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Ausemes (U.S Patent No. 6,434,403) with Tso (U.S. Patent No. 5,890,016) in order to fit both communication devices together smoothly. But, the combination of Ausemes and Tso fail to teach logic in communication with the communication device, that the logic checks if communications have been received. However, Foladare teaches logic in communication with the communication device, that the logic checks if communications have been received (column 1, lines 29-column 2, lines 42 and claim 19, 21, 23, and 25). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill



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in the art to combine Ausemes (U.S Patent No. 6,434,403) and Tso (U.S. Patent No. 5,890,016) with Foladare (U.S. Patent No. 5,894,595) in order not to miss valuable incoming messages.

Referring to claim 37, the combination of Ausemes, Tso and Foladare teach a communication device as recited in claim 36, comprising a housing having a compact configuration enclosing the modem, interface and the logic, where the compact configuration of the housing provides a compact configuration for the communication device (see Ausemes figures 1 and 2, number 102, column 2, lines 65-67 and column 3, lines 22-26 and claim 1).

Referring to claim 39, the combination of Ausemes, Tso and Foladare teach a communication device as recited in claim 36 that the personal data assistant is a handheld (see Ausemes figure 1 and column 3, lines 5-911).

Referring to claim 40, the combination of Ausemes, Tso and Foladare teach a communication device as recited in claim 36 that logic is a mini microchip (see Ausemes figure 3, number 305).

Referring to claim 41, the combination of Ausemes, Tso and Foladare teach a communication device as recited in claim 37 that the logic activates an indicator if communications have been received (see Foladare, column 1, lines 29-column 2, lines 41 and claim 19, 21, 23, and 25).

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15. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S. Patent No. 6,434,403), Tso (U.S. Patent No. 5,890,016) and Foladare (U.S. Patent No. 5,894,595) further in view of Salo (U.S. Patent No. 6,609,148).

Referring to claim 38, the combination of Ausemes, Tso and Foladare teach a communication device as recited in claim 36 that the logic checks for received communications while a user of the personal data assistant is running another application (see Foladare column 1, lines 29-column 2, lines 41 and claim 19, 21, 23, and 25), Ausemes, Tso and Foladare fail to teach periodically checking for received communication. However, Salo teaches periodically checking for received communication (column 18, lines 1-20). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Ausemes, Tso and Foladare with Salo in order not to miss important incoming messages.

16. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S. Patent No. 6,434,403), Tso (U.S. Patent No. 5,890,016) and Foladare (U.S. Patent No. 5,894,595) further in view of Bouvrette (U.S. Patent No. 4,626,622).

Referring to claim 42, the combination device recited in 41 of Ausemes, Tso and Foladare teach a handheld communication device as recited in claim 26. But, Ausemes, Tso and Foladare fail to teach that the indicator is an LED. However, Bouvrette teaches the indicator is an LED (column 7, lines 3-12). Therefore, at the time of the invention, it would have been obvious to a person of

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ordinary skill in the art to combine the art of Ausemes, Salo and Foladare with Bouvrette in order to determine visually the type of communication.

17. Claim 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S. Patent No. 6,434,403), Tso (U.S. Patent No. 5,890,016) and Foladare (U.S. Patent No. 5,894,595) further in view of Want (U.S. Patent No. 6,122,520).

Referring to claim 43, the combination of Ausemes, Tso and Foladare teach a communication device as recited in claim 36. But, Ausemes, Tso and Foladare fail to teach the logic is field programmable gate array. However, Want teaches that the logic is a field programmable gate array (FPGA) (column 9, lines 34-57). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the art of Ausemes (U.S. Patent No. 6,434,403), Tso (U.S. Patent No. 5,890,016) and Foladare (U.S. Patent No. 5,894,595) with Want (U.S. Patent No. 6,122,520) in order to program the communication device's controller as needed.

Referring to claim 44, the combination of Ausemes, Tso, Foladare and Want teach a communication device as recited in claim 36 that the logic is a programmable logic (see Want column 9, lines 34-57).

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Referring to claim 45, the combination of Ausemes, Tso, Foladare and Want teach a communication device as recited in claim 36 that the logic is an application specific integrated circuit (ASIC) (see Want column 9, lines 34-57).

18. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ausemes (U.S. Patent No. 6,434,403), Tso (U.S. Patent No. 5,890,016) and Foladare (U.S. Patent No. 5,894,595) further in view of Jones (U.S. Patent No. 6,191,743).

Referring to claim 46, Ausemes, Tso and Foladare teach a communication device as recited in claim 36. But, Ausemes, Tso and Foladare fail to teach a detachable antenna attached to the communication device. However, Jones teaches teach a detachable antenna attached to the communication device (figure 4, and column 2, lines 44-58, column 4, lines 49-55, and claims 1, 2, 6-9). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the art of Ausemes (U.S. Patent No. 6,434,403), Tso (U.S. Patent No. 5,890,016) and Foladare (U.S. Patent No. 5,894,595) with Jones (U.S. Patent No. 6,191,743) in order to provide an antenna interface for PDA that allows the user to select a preferred placement of the antenna instead of fixed attachment.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alemayehu Behulu whose telephone number is 703-305-4828. The examiner can normally be reached on 8 AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-746-3501.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

AB

  
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